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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,653	07/15/2003	Hironori Kondo	Q76188	5270
23373	7590	08/12/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			VORTMAN, ANATOLY	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/618,653

Applicant(s)

KONDO ET AL.

Examiner

Anatoly Vortman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) 2-5 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 6-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/14/05 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US/4,689,597 to Galloway et al., (Galloway).

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Regarding claims 1, 6, 9, and 11, Galloway disclosed (Fig. 4D) a fuse belt comprising: a plurality of fuse elements, a pair of flat terminal pieces (14A, 14B) interconnected by a fusible part (30), each of which includes an insulating housing (12) in which said fusible part (30) and inner and upper edges of said terminal pieces (14A, 14B) are accommodated; and a coupling part (70) that is unitary to the fuses, to which said flat terminal pieces (14A, 14B) of said fuse elements are coupled so as to be aligned along said coupling part (70), wherein removal of said coupling part (70) results in said plurality of fuse elements being separated (at least electrically) from each other.

Regarding the process limitations of claims 7 and 8 (pressing), and of claim 10, even though the claims are limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, the process limitations of the aforementioned claims had not been given patentable weight.

4. Alternatively, claims 1 and 6-11, are rejected under 35 U.S.C. 102(b) as being anticipated by US/6,157,287 to Douglass et al., (Douglass).

Regarding claims 1, 6, 9, and 11, Douglass disclosed (Fig.3, 6): a plurality of fuse elements (10A, 10B), a pair of flat terminal pieces (38) interconnected by a fusible part (inherently), each of which includes an insulating housing in which at least said fusible part and inner and upper edges of said terminal pieces (38) are accommodated; and a coupling part (14)

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that is unitary to the fuses to which said flat terminal pieces (38) of said fuse elements (10A, 10B) are coupled so as to be aligned along said coupling part (14), wherein removal of said coupling part (14) results in said plurality of fuse elements being separated from each other.

Regarding the process limitations of claims 7, 8, and 10, even though the claims are limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production.

If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, the process limitations of the aforementioned claims had not been given patentable weight.

5. Yet alternatively, claims 1 and 6-11, are rejected under 35 U.S.C. 102(e) as being **clearly** anticipated by US/6,556,121 to Endo et al., (Endo).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1, 6, 9, and 11, Endo disclosed (Fig. 2, 3A, 4) a fuse belt comprising: a plurality of fuse elements (fuses), a pair of flat terminal pieces (2) interconnected by a fusible part (5), each of which includes an insulating housing (4) in which said fusible part (5) and inner

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and upper edges of said terminal pieces (2) are accommodated; and a coupling part (51) that is unitary to the fuses, to which said flat terminal pieces (14A, 14B) of said fuse elements are coupled so as to be aligned along said coupling part (70), wherein removal of said coupling part (70) results in said plurality of fuse elements being separated from each other.

Regarding the process limitations of claims 7 and 8 (pressing), and of claim 10, even though the claims are limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, the process limitations of the aforementioned claims had not been given patentable weight.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Yet alternatively, claims 1 and 6-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over US/4,056,884 to Williamson et al., (Williamson) (of record), either in view of

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Electronic Industry Alliance Standard (EIA) RS-296-D (developed in 1978) or in view of Genesis Manufacturing, Inc. standard MEID-0001 (developed in 1996).

Regarding claims 1 and 6-11, Williamson disclosed a fuse (Fig. 1) having a pair of flat terminal pieces (8) interconnected by fusible part (20), an insulating housing (6) in which at least said fusible part (20) is accommodated, but did not disclose a coupling part to which the terminals of the plurality of fuses are coupled so as to form a fuse belt, wherein removal of said coupling part will result in separation of fuses from each other.

EIA-RS-296-D (<http://www.tyeeusa.com/PDF/caps/FilmCapacitorsLeadTaping&PackingofAxialCapacitor.pdf>) teaches a lead taping of electronic components (i.e. the leads or terminals are coupled to the tape, which is a coupling part) for packaging said electronic components in a reel, in order to accommodate said electronic components for automatic handling (see figures), wherein removal of said tape (i.e. coupling part) would result in separation of said electronic components.

Genesis Manufacturing, Inc. standard MEID-0001 (<http://www.genesismfg.com/MEID0001%20Rev%20B.pdf>) also teaches (p. 25, Fig. 10.2) radial lead taping specifications for electronic components (i.e. the leads or terminals are coupled to the tape, which is a coupling part) for packaging said electronic components in a reel, in order to accommodate said electronic components for automatic handling (see figure), wherein removal of said tape (i.e. coupling part) would result in separation of said electronic components.

It would have been obvious for a person of ordinary skill in the fuse art at the time the invention was made to package fuses of Williamson by coupling terminal pieces of the plurality of fuses to the tape so as to form a fuse belt having plurality of fuses coupled to the coupling part

(the tape) according to the teachings of either EIA RS-296-D standard or of MEID-0001 standard, in order to accommodate said fuses of Williamson for further automatic handling.

### *Response to Arguments*

8. Applicant's arguments have been fully considered but they are not persuasive.

Regarding the Galloway et al. reference, the Applicant contends that unlike in the Galloway et al, in the present invention “fuses can be *physically* separated from one another” (p. 6 of the Response, line 7). The Examiner would like to direct the Applicant’s attention to the fact that claims of the instant application do not contain limitation “physically separated”. Claims are broader than argued.

Regarding the Douglass et al reference, the Applicant contends that replacing the limitation “integral” with “unitary” would overcome the rejection. To the contrary, the Examiner believes that term “unitary” even broader than term “integral” and only states that elements form to one unit. Thus the previous rejection still applies.

Finally, regarding the Endo et al reference, the Applicant contends: “The Examiner relies on Figure 4 of Endo et al. However, this figure merely shows intermediate stages for manufacturing the separate fuses.” (p. 7, lines 12+ of the Response). The Examiner would like to remind the Applicant that Fig. 1, 2, 3, 5, 6, and 7 of the instant application also depict intermediate stages for manufacturing the separate fuses (i.e. the fuse belt is not the end product, but the separate fuse is). The Examiner would like to advice the Applicant that it does not matter



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which structure is depicted on the Figures, i.e. final structure or intermediate one. What is important is the fact that claim reads on the structure disclosed by the prior art.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Bel Fuse Inc. publication (<http://www.belfuse.com/Data/DBObject/tapereel.pdf>) provides tape and reel packaging information for fuses with radial leads (see top figure).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AV

A handwritten signature in dark ink, appearing to read 'A. Vortman', with a long horizontal flourish extending to the right.

Anatoly Vortman  
Primary Examiner  
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